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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,792	09/26/2003	Kazuhiko Nagano	Q77647	4366
23373	7590	04/20/2006		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER GOLUB, MARCIA A	
			ART UNIT 2828	PAPER NUMBER

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/670,792

Applicant(s)

NAGANO ET AL.

Examiner

Marcia A. Golub

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2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 2/16/2006 have been fully considered but they are not persuasive.

The Applicant asserts that the reference sighted by the Examiner does not disclose *the lenses being mounted on the upper surface of the mounting block*. The Examiner disagrees and points to the description of Fig 13 (8/65-9/2), Fig 14 (9/45-47) and Fig 15 (10/7-10).

The Applicant further argues that the reference does not disclose *reference marks on the mounting surface to indicate the position of the lasers*. The Examiner points to channels [702] on the surface of the mounting block [700] that are disclosed in Fig 12. In addition grooves for holding laser bars in the mounting block are disclosed in the reference (2/34-40).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 1-14** are rejected under 35 U.S.C. 102(b) as being anticipated by Lang et al. (6,240,116) hereinafter '116.

Regarding **claim 1**, Fig 14 of '116 discloses "a laser apparatus comprising:

a stepped shape block [800a] formed with a plurality of mount portions [804a] which have different heights and are arranged a first direction [horizontal] parallel to an optical axis in order of height;

a plurality of sets of a collimator-lens array [807a] and a plurality laser diodes [805a] where the collimator-lens array in each of the plurality of sets is constituted by a plurality of collimator lenses which are arranged along a second direction [vertical] and

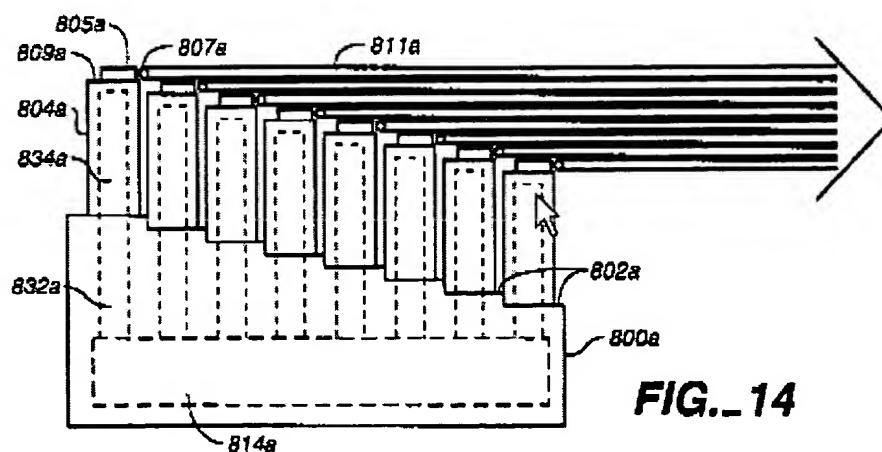
collimate laser beams [811a] emitted from the plurality of laser diodes in each of the plurality sets;

wherein said plurality of laser diodes [805a] and collimator-lens array [807a] in each of the plurality of sets are fixed to one of the plurality of mount portions [804a] so that light-emission points of the plurality of laser diodes in each of the plurality of sets are aligned in a second direction [vertical];

wherein each of the sets of collimator lens array [807a] and each of the plurality of laser diodes [805a] is mounted on a mount portion [804a];

wherein the mount portions [804a] on which each of the sets of collimator lens array [807a] are mounted have vertical heights different from the vertical heights of the mount portions on which the plurality of laser diodes [805a] are mounted; (Lenses mounted on one of the blocks are positioned at a different height than the lasers mounted on any other block. In addition Fig 6 discloses mounting lenses such that the lower portion of the lens is below the lower portion of the laser. Also, since the laser diodes are mounted on submounts [106] they are positioned higher than the lenses.)

and wherein the mounts portions [804a] on which the sets of a collimator lens array [807a] are mounted regulate the vertical position of each of the collimator lenses in each of the sets of a collimator lens array." (the vertical position of each set of lenses is regulated since they are positioned on a different steps)



Regarding **claims 2-14**, Fig 14 of '116 discloses a laser apparatus as described above:

2. “wherein a bottom surface of said collimator-lens array [807a] in said each of said plurality of sets is fixed to an upper surface [809a] of said one of said plurality of mount portions [804a] so that the collimator-lens array is supported by the upper surface [809a] of said one of said plurality of mount portions [804a]; (9/45-47)

3,4. “wherein said plurality of laser diodes [708] in each of the plurality of sets is fixed to a surface of one of the plurality of mount portions [704], and reference marks [702] which indicate fixation positions of the plurality of laser diodes [708] are arranged on said surface [704] of said one of the plurality of mount portions; (Fig 12)

5-8. “wherein said plurality of laser diodes in each of the plurality of sets are realized by a plurality of multicavity laser diode chips each having a plurality of light-emission points; (Fig 10)

9,10. wherein said plurality of laser diodes in each of the plurality of sets are each a single-cavity laser diode chip having a single light-emission point; (Fig 9)

11,12. “wherein said block is formed by combining a plurality of planar plates [804] which are stacked in one of a vertical direction and said first direction;

13,14. “wherein said plurality of planar plates [804a] are arranged in correspondence with steps [802a] constituting the stepped shape, respectively.”

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

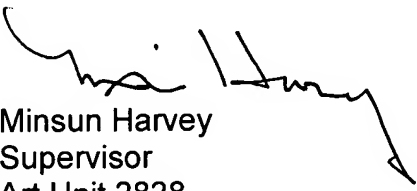
***Contact Info***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcia A. Golub whose telephone number is 571-272-8602. The examiner can normally be reached on M-F 9-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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